# NEW HAMPSHIRE DEPARTMENT OF Environmental Services

## -Request For Proposal-

# New Hampshire Department of Environmental Services

## 2010 Drinking Water Capital Investment Needs Analysis

#### I. Introduction

The New Hampshire Department of Environmental Services (DES) is requesting proposals for an analysis of drinking water capital investment needs for New Hampshire community water systems over a 20-year period. This effort is part of sustainability planning for drinking water systems and generation of information for current and future efforts to address infrastructure needs.

## II. Background

The US Environmental Protection Agency (EPA) conducts a Drinking Water Infrastructure Needs Survey and Assessment (Needs Survey) at approximately 5-year intervals. The survey is conducted primarily for allocation of infrastructure improvement funds among the states. Projects must be thoroughly documented using master plans, capital improvement plans and professional judgment. Further, certain projects, such as those undertaken to meet future demand, fire protection, and certain source water objectives, have been excluded from the survey. Needs Surveys have utilized the following system size categories and survey methods:

- Large systems serving >100,000 mailed questionnaire and follow-up
- Medium systems serving 3,300 100,000 state specific sampling of representative population
- Small systems serving <3,300 national small system sample by contractor

The results of the most recent EPA Needs Survey conducted in 2007 show 20-year public water system needs totaling \$335 billion broken out as follows:

- 60% Transmission and distribution
- 22% Treatment
- 11% Storage
- 6% Source
- 1% Other

DES is seeking alternate, more effective approaches to long term cost estimating that produce results superior to the previously-used Needs Survey approach. Preliminary discussion with water suppliers and others in the industry indicates that more reliable cost estimating may be possible based on infrastructure asset value, current replacement costs (using recently-bid projects) and generalized asset service life. The results from the prior approach may have been reliable for the near term, but less reliable for time periods extending beyond traditional planning and capital improvement planning.

Water suppliers currently generate asset value data which may be of use in this analysis to a limited extent. At least several larger municipal systems follow asset valuation and cost accounting principles based on General Accounting Standards Board (GASB) 34. In addition, regulated public utilities generate asset valuations for the purpose of determining depreciation to be recovered through customer bills.

Investment Needs Analysis March 1, 2010 Page 2 of 3

Preliminary discussions have examined possible cost modeling approaches using population and facilities information from the DES water system database. The asset valuation emphasis would be on distribution, treatment, storage, and source capital costs based on the 2007 Needs Survey breakout presented above. Annual replacement costs would be based on estimated service life for the various categories. Information on each community system in the DES water system database, which will be made available to the contractor includes:

- Service population
- Source inventory
- Treatment provided
- Total storage volume

Model calibration would rely on detailed field interviews at a sample of systems representing a range of service population, source type (surface water vs. groundwater), treatment (minimal vs. extensive) and fire protection (provided and not).

In addition to obtaining modeled cost results, a written and/or oral survey approach to capture systems' perceived needs will be conducted in conjunction with DES staff. The final analysis will combine perceived needs and modeled costs into a best estimate of long term needs.

# III. Scope of Work

Although consultants are encouraged to present alternate approaches to that outlined here, proposals should conform to the following parameters:

- Cost estimating time frame: 2010 to 2030
- Water system study numbers: 707 community (residential) water systems
  - $\triangleright$  Systems serving 25 to 500 589
  - > Systems serving 500 to 3,300 79
  - > Systems serving 3,300 to 100,000 38
  - Systems serving more than 100,000 1
- Sample of water systems for detailed sampling: 30 systems minimum
- Assessment of perceived needs determined in conjunction with DES staff efforts
- Cost categories to be included:
  - Replacement of existing transmission, distribution, treatment, storage, and source capacity
  - Source water protection
  - Instrumentation and communications improvements
  - Financing costs
- Cost categories to be excluded:
  - Future growth
  - Operation and maintenance, including wages, salaries, materials, energy
  - Costs of compliance with future regulation
  - Acquisition of vehicles and tools

Each proposal shall include at least three progress presentations and one final presentation at DES in Concord. Eight copies of the final report shall be provided to DES.

**Investment Needs Analysis** March 1, 2010 Page 3 of 3

## IV. Funding Availability

It is expected that funds available for this project will be in the \$20,000 to \$40,000 range, although details of the selected proposal may influence this range.

## V. Schedule

March 1, 2010	RFP packages are made available.
March 10, 2010	Optional bidders' meeting at DES, Room 111 at 10:00 a.m.
March 22, 2010	Bidders' proposals due to DES by 4:00 PM EST.

It is expected that a Notice to Proceed will be issued in early summer 2010 following contract approval by the Governor and Executive Council.

## VI. Bidders' meeting

Prospective bidders will have an opportunity to ask questions with regard to this RFP at an optional bidders' meeting scheduled for March 10, 2010 at 10:00 AM, EST at the DES office at 29 Hazen Drive, Concord, NH in Room 111. DES will respond to oral questions at the meeting. Call-in access will be provided. A summary of meeting discussion and any scope of work modifications will be made available to bidders by March 16, 2010.

#### VII. Evaluation Criteria

A selection committee consisting of DES representatives will evaluate the submitted proposals based on the following criteria:

- Methodology and approach 50% - Experience in working with the water industry
- Experience with economic modeling and statistical design 25%

## VIII. Proposal Submittal Date

Proposals must be submitted no later than March 22, 2010 at 4 PM, 2010 to:

Robert Mann Drinking Water & Groundwater Bureau New Hampshire Department of Environmental Services 29 Hazen Drive, PO Box 95 Concord, NH 03302-0095 robert.mann@des.nh.gov

## IX. Questions and Additional Information

All inquiries related to this request for proposal should be made to Robert Mann who may be reached using the address above, by telephone (603) 271-2953, or by email robert.mann@des.nh.gov. DES reserves the right to interview the top proposals before making a final selection. Applicants may be contacted to provide further clarification. The successful candidate will be expected to enter into a State of New Hampshire Contract Agreement.